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electrodes onto the surface of the semiconductor layer with which said at least one electrode is in contact;

wherein said migration barrier comprises at least one of Ti and W.

- 2. The device as defined by claim 1/wherein said at least one electrode comprises a silver-containing electrode.
- 3. The device as defined by claim 1, wherein said device further includes means for applying electrical signals across said first and second electrodes, and wherein said migration barrier is operative to prevent electrochemical migration of metal from said at least one electrode on said surface of the semiconductor layer with which said electrode is in contact.

4. (Amended) The device as defined by claim 13, wherein said device further includes means for applying electrical signals across said first and second electrodes, and wherein said migration barrier is operative to prevent electrochemical migration of metal from said at least one electrode on said surface of the semiconductor layer with which said electrode is in contact.

- 5. The device as defined by claim 1, wherein said plurality of semiconductor layers includes an n-type layer of a III-V nitride semiconductor and a p-type layer of a III-V nitride semiconductor, and wherein said at least one electrode is deposited on said p-type layer.
- 6. The device as defined by claim 4, wherein said plurality of semiconductor layers includes an n-type layer of a III-V nitride semiconductor and a p-type layer of a III-V nitride semiconductor, and wherein said at least one electrode is deposited on said p-type layer.
- 7. The device as defined by claim 5, wherein said device includes an active lightemitting region at the pn junction between said p-type layer and said n-type layer.

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- 8. The device as defined by claim 6, wherein said device includes an active lightemitting region at the pn junction between said p-type layer and said n-type layer.
- 9. The device as defined by claim 1/, wherein said migration barrier comprises a guard ring around the periphery of said at least one electrode.
- 10. The device as defined by claim 4, wherein said migration barrier comprises a guard ring around the periphery of said at/least one electrode.

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(Amended) The device as defined by claim 9, wherein said guard ring contacts

said at least one electrode.

Please cancel claim 12.

13. (Amended) A light-emitting device, comprising:

a semiconductor structure having a plurality of semiconductor layers and including an active region within said layers;

first and second conductive metal electrodes contacting respectively different semiconductor layers of said structure; and

a migration barrier for preventing migration of metal from at least one of said electrodes onto the surface of the semiconductor layer with which said at least one electrode is in contact;

wherein said migration barrier comprises a guard ring spaced from said at least one electrode.

Please cancel claim 14.

15. The device as defined by claim 13 wherein said guard ring is held at a positive potential with respect to the potential of said at least one electrode.

Please cancel claim 16.

17. The device as defined by claim 11, wherein said guard ring covers a portion of said surface of the semiconductor layer with which said at least one electrode is in contact.

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The device as defined by claim 13, wherein said guard ring covers a portion of 18. said surface of the semiconductor layer with which said at least one electrode is in contact. 19. The device as defined by claim 11, wherein said guard ring has a substantially step-shaped cross-section, and also covers the edge of said at least one electrode. Please cancel claim 20. 21. The device as defined by claim 1, wherein said migration barrier comprises a guard sheet that covers the surface of said/at least one electrode. Please cancel claim 22. 23. (Amended) The device as defined by claim 13, wherein said guard ring comprises a conductive material. 24. (Amended) The device as defined by claim 21, wherein said guard sheet comprises a conductive material. 25. The device as defined by claim 23, wherein said conductive material is a conductive metal. Please cancel claim 26. 27. The device as defined by claim 25, wherein said conductive metal comprises a metal containing at least one of Ni/, Ti, W, Al, Cr, Cu, Au, Sn, Rh, Re, Ru. 28. (Amended) A light-emitting device, comprising: a semiconductor structure having a plurality of semiconductor layers and including an active region within said layers; first and second conductive metal electrodes contacting respectively different semiconductor layers of said structure; and PATENT LAW GROUP LLP 35 N. FIRST ST. a migration barrier for preventing migration of metal from at least one of said SUITE 223 JOSE, CA 95134 408) 382-0480 X (408) 382-0481 electrodes onto the surface of the semiconductor layer with which said at least one electrode is in contact;

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wherein said migration barrier comprises at least one of Al, Cr, Cu, Au, Sn, Rh, Re, Ru.

29. (Amended) A light-emitting device, comprising:

a semiconductor structure having a plurality of semiconductor layers and including an active region within said layers;

first and second conductive metal electrodes contacting respectively different semiconductor layers of said structure; and

a migration barrier for preventing migration of metal from at least one of said electrodes onto the surface of the semiconductor layer with which said at least one electrode is in contact;

wherein said migration barrier includes an edge protector portion comprising a dielectric material which covers an edge of said at least one electrode, and a conductive guard sheet that covers said edge protector portion and at least a portion of said at least one electrode.

Please cancel claims 30 and 31.

32. (Amended) A light emitting device, comprising:

a semiconductor structure that includes a light-emitting active region between an ntype layer of III-V nitride semiconductor, and a p-type layer of III-V nitride semiconductor;
a p-electrode comprising silver-containing metal deposited on said p-type layer;
an n-electrode coupled with said n-type layer;

means by which electrical/signals can be applied across said electrodes to cause light emission from the active region; and

a migration barrier for preventing electrochemical migration of silver ions from said pelectrode toward the active region, the migration barrier comprising at least one of Ti, W, Al, Cr, Cu, Au, Sn, Rh, Re, Ru.

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- 33. The device as defined by claim 32, wherein said migration barrier comprises a guard ring around the periphery of said p-electrode.
- 34. The device as defined by claim 33, wherein said guard ring covers a portion of the p-type layer.
- 35. The device as defined by claim 33, wherein said guard ring contacts said pelectrode.
- 36. The device as defined by claim 33, wherein said guard ring is spaced from said p-electrode.
- 37. The device as defined by claim 36 wherein said guard ring is held at a positive potential with respect to the potential of said p-electrode.
- 38. The device as defined by claim 35, wherein said guard ring has a substantially step-shaped cross-section, and also covers the edge of said p-electrode.
- 39. The device as defined by claim 32, wherein said migration barrier comprises a guard sheet that covers the surface of said p electrode.
- 40. The device as defined by claim 33, wherein said guard ring comprises a conductive material.
- 41. The device as defined by claim 39, wherein said guard sheet comprises a conductive material.
- 42. The device as defined by claim 40, wherein said conductive material is a conductive metal.
- 43. The device as defined by claim 41, wherein said conductive material is a conductive metal.

Please cancel claims 44 and 45.

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